Loxicom® (meloxicam)

Non-steroidal anti-inflammatory drug for use in dogs and cats only

Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian

Warning: Repeated use of meloxicam in cats has been associated with acutr renal failure and death. Do not administer additional injectable or oral meloxicam to cats. See Contraindications, Warnings, and Precautions for detailed information.

Description: Meloxicam is a non-steroidal Description: Meloxicam is a non-sterional amin-inflammatory drug (NSAID) of the existant class. Each mL of this sterile product for injection cortains meloxicam 50 mg. alcohol 15%, glycofurol 10%, poloxiamer 188 5%, sodium chloride 0.5%, glycine 0.5% and meglumine 0.3%, in water for injection, pH adjusted with sodium hydroxide and hydrochloric acid.

Indications:
Cats: For the control of postoperative pain and inflammation associated with orthopedic surgery, ovariohysterectomy and castration when administered prior to surgery.

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surgery, ovanohysterectomy and castration when administered prior to surgery.

Dosage and Administration:

Carefully consider the potential benefits and risk of Loxicom and other treatment options before deciding to use Loxicom. Use the lowest effective dose for the shortest duration consistent with individual response.

Cats: Administer a single, one-time subcutaneous dose of Loxicom. 5 mg/ml. Solution for liqection to cats at a dose of 0.14 mg/lb 0.30 mg/kg body weight. Use of additional meloxican or other NSABLE is contraindicated. (See Contraindications). To ensure accuracy of dosing, the use of a 1 mL graduated syring is recommended.

Contraintifications Cats with known buncerson/ship to meloxic am solution to received projects.

Contraindications: Cats with known hypersensitivity to meloxicam should not receive Loxicom 5 mg/ml. Solution for Injection. Additional doses of meloxicam or other NSAIDs in cats are contraindicated, so no safe dosage for repeated NSAID administration has been established (See Animal Safety). Do not use meloxicam in cats with pre-existing renal dysfunction.

Warnings: Not for use in humans. Keep this and all medications out of reach of children Consult a physician in case of accidental ingestion by humans. For subcutaneous (SQ) injectable use in cats. Do not use IV in cats.

Do not administer a second dose of meloxicam.

Do not follow the single, one-time dose of meloxicam with any other NSAID. Do not administer meloxicam oral suspension following the single, one-time injectable dose of meloxicam.

Mhen administering any NSAID, appropriate laboratory testing to establish hematological and serum biochemical baseline data is recommended prior to use in dogs and cats. All cats should undergo a thorough history and physical examination before administering meloxican Do not repeat the single, one-time does of meloxicam in cats. Owner should be advised to observe their cats for signs of potential drug toxicity.

Precautions:
The safe use of Loxicom 5 mg/mL Solution for Injection in cats younger than 4 months of age, Precautions:

The safe use of Loxicom 5 mg/ml. Solution for Injection in cats younger than 4 months of age, cats used for breeding, or in pregnant or lactating queens has not been evaluated. Meliococam is not recommended for use in cats with bleeding disorders, as safety has not been established in cats with these disorders. Safety has not been established for intravenous (IV) or intramsuctal (IVI) use in cats. When administering Loxicom 5 mg/ml. Solution for Injection, use a syringe of appropriate size to ensure precise dosing.

As a class, cyclo-oxpenase inhibitory NSAIDs may be associated with gastoritiestical, renal, and hepatic toxicity, Sensitivity to drug-associated adverse events varies with the individual paleient. Cats that have expenienced adverse reactions from one NSAID may expenience adverse reactions from another NSAID. NSAIDs may inhibit the prostaglandins that maintain normal homeestatic function. Such arish preclagal and feeters may result in flinically significant disease in patients with underlying or pre-existing diseases that has not been previously diagnosed. Patients at greatest sirk for adverse everients are the other at or electronic month and transmitted in the contraction of the con

sider appropriate washout times when switching from corticosteroid use to meloxicam in . As a single use product in cats, meloxicam should not be followed by additional

Consider appropriate washout thries when switching from cortocasterod use to melococam in casts. As a single use product in cats, melociacian should not be followed by additional NSAIDs or corticosteroids.

NSAIDs or corticosteroids.

The use of concomitanthy protein-bound drugs with Loxicom 5 mg/mL Solution for Injection has not been studied in cats. Commonly used protein-bound drugs include cardiac, articonvolusant, and behavioral medications. This millutence of concomitant drugs that may inhibit metabolism of Loxicom 5 mg/mL Solution for Injection has not the en evaluated. Drug compatibility should be monitored in patients requiring adjunctive therapy.

The effect of cyclo-oxygenase inhibition and the potential for thromboembolic occurrence or a hyper-coagulable state has not been studied.

a hyper-cosquilable state has not been studied.

Adverse Reactions:
Cats: A field study involving 138 cats was conducted. Of the 72 cats receiving meloxicam inection, six cats (83%) experienced post-treatment elevated serum blood urea nitrogen (BUM) levels. The pre-treatment values were in the normal range, Of the 65 cats in the butorphand treatment group, no cats experienced post-treatment elevated serum blood urea nitrogen levels. Nor the cats (125%) receiving meloxican injection had post-treatment aremia. Pre-treatment, these cats all had hematocrit and hemoglobin values in the normal range. For extending the cats of the state of the contract of the contract

Foreign Experience: Repeated use in cats has been associated with acute renal failure and death. In studies used for the foreign approval of meloocam nijection in cats, lethargy, vomiting, inappetance, and transient pain immediately after nijection were noted. Diarrhea and fecal occult blood have also been reported.

Post-Approval Experience (Rev. 2009): The following adverse reactions are based on post-approval adverse drug event reporting. The categones are filsted in decreasing order of frequency by body system: Urinary: azotemia, elevated creatinine, elevated phosphorus, renal failure

Gastrointestinal: *anorexia, vomiting, diarrhea* Neurologic/Behavioral: *lethargy, depressio*n Hematologic: *anemia*

Death has been reported as an outcome of the adverse events listed above. Acute renal failure and death have been associated with the use of meloxicam in cats. To report suspected adverse drug vents, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Notrook at 1-866-891-9777. For additional information about adverse drug experience reporting in a mined drugs, contact FDA at 1-888-FDA-VETS or online at www.fda.gov/reportanimalae.

Information For Cat Owners: Meloxicam, like other NSAIDs, is not free from adversi incommunitation of advolveds. Medicularly, like order 1990, is not like to incommunity and be informed of the clinical signs associated with NSAID intolerance. Adverse reactions may include vomiting, diarrhea, lethargy, decreased appetite and behavioral changes. vomiting, diarrhea, lethargy, decreased appetite and behavioral changes.
Cat owners should be advised when their pet has received a meloxicam injectior
Cat owners should contact their veterinarian immediately if possible adverse rea

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Clinical Pharmacology. Meloxicam has nearly 100% bioavailability after subcutaneous injection in cats. The terminal elimination half-life after a single dose is estimated to be approximately 15 fibs (±10%) in cats. Peak drug concerntations of 1.1 mg/ml. can be expected to occur within 1.5 hours following a 0.5 mg/kg subcutaneous injection in cats the volume of distribution (Will in cats is approximately 0.27 L/kg, with an estimated tota systemic clearance of 0.013 L/k/kg. The drug 8.97% bound to feline plasma proteins.

systemic clearance of 0.013 L/m/kg. The drug is 97% bound to feline plasma proteins.

Heficitiveness.

Cats: The effectiveness of meloxicam injection was demonstrated in a masked field study involving a total of 138 cats representing various breeds. This study used butorphand as an active control. Cats received either a snigle subcutaneous injection of 0.3 mg/kg meloxicam injection or 0.4 mg/kg flourophanol pior to mychectomy, either alone or in conjunction with surgical neutering. All cats were premedicated with aceptomazine, induced with proptioil and maintained on isoffurane. Para assessment variables evaluated by veterinarians included additional pain intervention therapy, gal/lameness score, analgiesia score, sedation score, general impression score, recovery score, and visual analog scole score. Additionally, a cumulative pain score, which was the summation of the analgesia, sedation, heart rate and respiratory rate scores was evaluated.

A palpometer was used to quarrify the pain threshold.

A substantial number of cats required additional intervention in the 0-24 hour post-surgical period, with the majority of these interventions taking place within the first hour. Therefore, the period, with the majority of these interventions taking place within the first hour. Therefore, the period aparticular control of the first firm 0 post-surgical evaluation, i.e., exhabition. At this point, the need to provide a pain intervention as a result of the first firm 0 post-surgical evaluation, i.e., exhabition. At this point, the need to provide a pain intervention was not statistically significant between the two groups (p=0.7125). However, the median number of interventions was one per cat in the neloxicam group and two per cat in the butorphanol group and this difference was statistically significant the—10.012. The statistical evaluation supports the conclusion that the neloxicam group received one or more interventions (6.7%), and 47 of 6 cats in the butorphanol group and two per cate in the butorphanol group

Animal Safety.

Cats: 3 Day Target Animal Safety Study - In a three day safety study, subcutaneous meloxicam nipection administration to healthy cats at up to 1.5 mg/kg (5X the recomme dose) resulted in voninting in three cats (1 of 6 control cats and 2 of 6 cats in 5X). Feat on tour cats (2 of 6 control cats and 2 of 6 cats in 5X). Feat on the twenty cats in the control group. This was not a control cats and 2 of 6 cats in 6X). Feat on the twenty cats in the control group. This was not a control group. This was not a control cats and 2 of 6 cats in 5X). Feat on the twenty cats in the control group. This was not a control group.

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Histological examination revealed gastrointestinal lesions ranging from inflammatory cell inflitration of the mucosa of the GI tract to erosions. Mesenteric ymphadenopathy was identified in 1 of 6 cats in 1X. Renal changes ranged from dilated medullary /2 of 6 cats in 1X, 1 of 6 cats in 3X, and 1 of 6 cats in 3X, and 3 of 6 cats in 3X, and 1 of 6 cats in 3X, and 2 of 6 cats in 3X, and 3 of 6 cats in 3X, and 3

papilla for life ats in SXI.

Subsequent oral dosing - In a nine day study with three treatment groups, meloxicam injection was given as a single subcutaneous nijection using doses of 0 mg/kg (saline injection), 0.3 mg/kg and 0.6 mg/kg on Dx (Meloxicam oral suspension, 1.5 mg/km, 1.0 saline was then administered orally once daily at the same respective dose (0.3 or 0.6 mg/kg) for eight consecutive days. Clinical adverse reactions included vomiting, diarrhea, Jethargy, and decreased food consumption in the treated groups, and on de ayd of alimet in one control cat. The gross necropsy report includes observation of reddened Gli mucosa in 3 of 4 cats in the 0.3 mg/kg group and 1 of 4 cats in the 0.3 mg/kg group and 1 of 4 cats in the 0.8 mg/kg group. All saline-restated cats were romall. By Day 9, one cat in both the 0.3 mg/kg group and the 0.6 mg/kg group died and another cat in the 0.3 mg/kg group is manchand. The cause of death for these cats could not be determined, although the pathologist groveded prior doubled and laceration in the cats in 0.6 mg/kg group. The salely studies demonstrate a narrow margin of safety.

using yag group. The salery subles benindrate a harrow margin of salety.

Injection Stat Plerance – Histophology of the injection sites revealed hemorrhage and inflammation, myofiber atrophy, parniculis, librar deposition, and floroblast profiferation. These findings were present in cats in all groups, with the 3X cats having the most present. No safe repeat does has been established in cats.

Storage Information: Store at controlled room temperature, 68-77°F (20-25°C). Use within 180 days of first puncture and puncture a maximum of 51 times.

How Supplied: Loxicom 5 mg/mL Solution for Injection: 10 mL and 20 mL vial

Reference:

*Slingsby L.S., A.E. Waterman-Pearson. Comparison between meloxicam and carprofen for postoperative analgesia after feline ovariohysterectomy. Jour of Small Anim Pract (2002/43:286-289.

Made in the UK. Norbrook Laboratories Limited, Newry, BT35 6PU, Co. Down, Northern Ireland

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Artwork Specification for Norbrook USA from Gareth Gillespie (08/06/2021) Customer..... Norbrook COLOURS USED: TINT OF COLOUR USED: Country......USA PMS Black Product Loxicom 5mg Volume Insert Norbrook Resource Code...... 6405318670103 Norbrook Laboratories Limited Scale 100% Newry, BT35 6QQ, Northern Ireland Minimum Font Size..... 5.7 pt Tel: +44 (0)28 30264435 Dimensions 210 x 125 mm Email: gareth.gillespie@norbrook.co.uk Material & Varnish 70gsm offset white paper, no varnish Web: www.norbrook.com Weight 70gsm



Package Insert for Dogs Approved by FDA under ANADA # 200-491



Non-steroidal anti-inflammatory drug for use in dogs and cats only

Caution:

Federal law restricts this drug to use by or on the order of a licensed veterinarian

Warning: Repeated use of meloxicam in cats has been associated with acute renal failure and death. Do not administer additional injectable or oral meloxicam to cats. See Contraindications, Warnings, and Precautions for detailed information.

Description: Meloxicam is Description:
Meloxicam is a non-steroidal
anti-inflammatory drug (NSAID) of the
oxicam class. Each m.l. of this sterile
product for injection contains meloxicam
5.0 mg, alcohol 15%, glycofurol 10%,
poloxiamer 1885%, sodium chloride 0.8%,
glycine 0.5% and meglumine 0.5%, in
water for injection, p.H adjusted with
sodium hydroxide and hydrochloric acid. **>**0

Indications:

Indications:
Dogs: Loxicom® (meloxicam) 5 mg/mL Solution for Injection is indicated in dogs for the control of pain and inflammation associated with osteoarthritis.

Dosage and Administration:

Dosage and Administration:

Carefully consider the potential benefits and risk of Loxicom and other treatment options before deciding to use Loxicom. Use the lowest effective dose for the shortest duration consistent with individual response.

Dogs: Loxicom 5 mg/mL. Solution for Injection should be administered initially as a single dose at 0.08 mg/lib (0.2 mg/kg) body weight intravenously (IV) or subcutaneously (solutiowed, after 25 hours, by Loxicom Oral Suspension at the daily dose of 10.045 mg/lb (0.1 mg/kg) body weight, either mixed with food or placed directly in the mouth.

Contraindications

Contamulations. Dogs with known hypersensitivity to meloxicam should not receive Loxicom 5 mg/mL Solution for Injection.

Varnings:

Not for use in humans. Keep this and all medications out of reach of children. Consult a physician in case of accidental ingestion by humans. For IV or SQ injectable use in dogs. All dogs should undergo a thorough history and physical examination before administering any NSAID. Appropriate laboratory testing to establish hematological and serum biochemical baseline data is recommended prior to, and periodically during use of any NSAID in dogs.

Owner should be advised to observe their dogs for signs of potential drug toxicity.

Precautions:

The safe use of Loxicom 5 mg/mL Solution for Injection in dags younger than 6 months of age, dogs used for breeding, or in pregnant or lactaing bitches has not been evaluated. Meloxicam is not recommended for use in dogs with bleeding disorders, as safety has not been established for interauscular IMI) administration in dogs. When administering Loxicom 5 mg/mL Solution for Injection, use a syringe of appropriate size to ensure precise dosing. As a class, cyclo-covagenase inhibitory NSAIDs may be associated with gastrointestinal, renal and hepatic toxicity. Sensitivity to drug-associated adverse events varies with the individual patient. Dogs that have experienced adverse vents varies with the individual patient. Dogs that have experienced adverse reactions from one NSAID may experience adverse reactions from another NSAID. Platients at greatest risk for renal toxicity are those that are dehydrated, on concomitant diuretic therapy, or those with existing renal, cardiovascular, and/or hepatic dysfunction. Concurrent administration of potentially nephrotoxic drugs should be carefully approached. NSAIDs may inhibit the prostaglandins that maintain normal homeostatic function. Such anti-prostaglandin effects may result in clinically significant disease in patients with underlying or pre-existing disease that has not been previously diagnosed.

Since NSAIDs soossess the potential in induce gastrointestinal ulcerations and/or perforations, concentrant use with other artis-inflammatory drugs, such as NSAIDs or corticosteroids, should be a voided if additional pain medication is needed after the administration of the total daily dose of meloxicam oral suspension, a non-NSAID or

corticosteroids, should be avoided. If additional pain medication is needed after the administration of the total daily dose of melouciam oral suspension, a non-NSAID or noncorticosteroid class of analgesia should be considered. The use of another NSAID is not recommended. Consider appropriate washout times when switching from corticosteroid use or from one NSAID to another in dogs. The use of concomitantly protein-bound drugs with Luxicon 15 mg/ml. Solution for hipection has not been studied in dogs. Commonly used protein-bound drugs include cardiac, anticonvulsant and behavioral medications. The influence of concomitant drugs that may inhibit metabolism of Loxicon 15 mg/ml. Solution for Injection has not been evaluated. Drug compatibility should be monitored in patients requiring adjunctive therapy. The effect of cyclic-oxygenase inhibition and the potential for thromboembolic occurrence or a hypercoagulable state has not been studied.

Adverse Reactions:

Dogs: A field study involving 224 dogs was conducted. Based on the results of this study, GI abnormalities (vomiting, soft stools, diarrhea, and inappetance) were the most common adverse reactions associated with the administration of meloxican. The following table lists adverse reactions and the numbers of dogs that experien them during the study. Dogs may have experienced more than one episode of the adverse reaction during the study.

Adverse Reactions Observed During Field Study		
Clinical Observation	Meloxicam (n=109)	Placebo (n=115)
Vomiting	31	15
Diarrhea/Soft Stool	15	11
Inappetance	3	0
Bloody Stool	1	0

In foreign suspected adverse drug reaction (SADR) reporting, adverse reactions related to meloxicam administration included: auto-immune hemolytic anemia (1 dog), thrombocytopot (1 dog), polyarthritis (1 dog), nursing puppy lethargy (1 dog), and pyoderma (1 dog).

Post-Approval Experience (Rev. 2009)
The following adverse reactions are based on post-approval adverse drug event reporting. The categories are listed in decreasing order of frequency by body system: Gastrointestinal: vomiting, diarrhea, melena, gastrointestinal ulceration Uninary, azotemia, elevated creatinine, renal failure Neurological. Behavioral. lethargy, depression Hepatic: elevated liver enzymes Dermatologic: pruritis

Death has been reported as an outcome of the adverse events listed above. Acute renal failure and death have been associated with the use of meloxicam in cats. To report suspected adverse drug events, for technical assistance or to obtain a copy of the Safety Data Sheet (SDS), contact Nortrook at 1-865-931-5777. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at www.fda.gov/reportanimalae.

at 1-885-FUA-VE1's or online at www.trda.gov/reportanimaiae.

Information For Dog Owners:

Meloxicam, like other NSAIDs, is not free from adverse reactions. Owners should be advised of the potential for adverse reactions and be informed of the clinical signs associated with NSAID intolerance. Adverser reactions may include vomiting, diarrhee, lethargy, decreased appetite and behavioral changes.

Dog owners should be advised when their pet has received a meloxicam injection. Dog owners should be not contact their veteraniam immediately if possible adverse reactions are observed, and dog owners should be advised to discontinue Loxicom therapy.

observed, and dog owners should be advised to discontinue Loxicom therapy.

Clinical Pharmacology.

Meloxicam has nearly 100% bioavailability when administered orally or after subcutaneous rijection in dogs. The terminal elimination half-life after a single dose is estimated to be approximately 41 fms (+;30%) in dogs regardless of route of administration. Drug bioavailability, volume of distribution, and total systemic clearance remain constant up to 3 times the recommended dose for use in dogs. However, there is some evidence of enthanced drug accumulation and terminal elimination half-life prolingation when dogs are dosed for 45 days or longer. Peak drug concentrations of 07.4% mcg/mt can be expected to occur within 25 hours following a 0.2 mg/kg subcutaneous injection in dogs. Based upon intravenous administration in Beagle dogs, the meloxicam volume of distribution in dogs (VdI) is approximately 0.32 L/kg and the total systemic clearance is 0.01 L/hr/kg. The drug is 97% bound to carrier plasma proteins.

The discount of Calmie plasmia proteins.

Dogs: The effectiveness of meloxicam injection was demonstrated in a field study involving a total of 224 dogs representing various breeds, all diagnosed with osteoarthritis. This placebe controlled, masked study was conducted for 14 days. Dogs received a subcutaneous injection of 02 mg/kg meloxicam injection on day 1. The dogs were maintained on 1.1 mg/kg oral meloxicam from days 2 through 14. Variables evaluated by veterinarians included lameness, veglit-bearing, pain on palpation, and overall improvement. If variable assessed by owners included mobility, ability to rise, limping, and overall improvement. In this field study, dogs showed clinical improvement with statistical significance after 14 days of meloxicam treatment for all variables.

In this held study, dogs showed clinical improvement with statistical significance after 14 days of meloxicam treatment for all vanables.

Animal Safety:

Dogs: 3 Day Target Animal Safety Study - In a three day safety study, meloxicam injection was administered intravenously to Beagle dogs at 1, 3, and 5 times the recommended dose (0.2, 0.6 and 1.0 mg/kg) for three consecutive days. Vomiting occurred in 1 of 6 dogs in the 5K group. Feal occut blood was detected in 3 of 6 dogs in the 5K group. No clinically significant hematologic couble look was detected in 3 of 6 dogs in the 5K group. No clinically significant hematologic couble blook was detected in 3 of 6 dogs in the 5K group. No clinically significant hematologic couble hose significantly increased in one 1X dog and two of the 5X dogs. One dog in the 5X group and 3 of 6 dogs in the 5X group, and the safety increased in one 1X dogs and two of the 5X dogs. One dog in the 5X group and 3 of 6 dogs in the 5X group, locreases in blood urea nitrogen (BUN) occurred in 3 of 6 dogs in the 5X group, and 2 of 6 dogs in the 5X group, and 2 of 6 dogs in the 5X group, and 5 of 6 dogs in the 5X group. For the 5X group, and 5 of 6 dogs in the 5X group. Two dogs in the 1X group, 2 of 6 dogs in the 5X group, and 5 of 6 dogs in the 5X group. Two dogs in the 1X group, 4 of 6 dogs in the 5X group, 5X g

brougs in the Sky group, and ver drougs in the Sky group.

Injection Site Tolerance – Meloxicam injection was administered once subcutaneously to Beagle dogs at the recommended dose of 0.2 mg/kg and was well-tolerated by the dogs. Pain upon injection was observed in one of eight dogs treated with meloxicam. No pain or inflammation was observed post injection. Long term use of meloxicam injection in dogs has not been evaluated.

Effect on Buccal Mucosal BleedingTime (BMBT) - Meloxicam injection (0.2 mg/kg) and placeb (0.4 ml/kg) were administered as single intravenous injections to 8 female and 16 male Beagle dogs. There was no statistically significant difference (p>0.05) in the average BMBT between the two groups.

Storage Information:
Store at controlled room temperature, 68-77°F (20-25°C). Use within 180 days of first puncture and puncture a maximum of 51 times.

low Supplied: oxicom 5 mg/mL Solution for Injection: 10 mL and 20 mL vial Made in the UK.

Norbrook Laboratories Limited Newry, BT35 6PU, Co. Down, Northern Ireland

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